

AMENDMENTS TO THE CLAIMS/LISTING OF CLAIMS

Please enter the following amendments without prejudice or disclaimer. This listing of claims will replace all prior versions, and listings, of claims in the application.

1-22. Canceled.

23. (Currently amended) A method of treating obesity in a human subject ~~in need thereof~~ comprising administering to said subject an amount of a composition comprising an amylin or amylin agonist effective to treat obesity in said human subject, wherein the amount of the amylin or amylin agonist administered in said composition is about 0.01 mg to about 5 mg per day, ~~[[and]]~~ wherein said composition is not administered in conjunction with another obesity relief agent, and wherein said human subject is in need of treatment for obesity.

24. (Previously presented) The method according to claim 23 wherein said amylin agonist is an amylin agonist analogue.

25. (Withdrawn) A method according to claim 24 wherein said amylin agonist analogue is selected from the group consisting of <sup>25,28,29</sup>Pro-h-amylin (SEQ ID NO:12), <sup>18</sup>Arg<sup>25,28,29</sup>Pro-human-amylin (SEQ ID NO:10), and <sup>18</sup>Arg<sup>25,28</sup>Pro-h-amylin (SEQ ID NO:8).

26. (Withdrawn) A method according to claim 24 wherein said amylin agonist analogue is <sup>25,28,29</sup>Pro-h-amylin (SEQ ID NO:12).

27. (Previously presented) The method according to claim 23 wherein said composition is administered subcutaneously.

28. (Withdrawn) A method according to claim 26 wherein said amylin agonist analogue is administered subcutaneously.

29. (Previously presented) The method according to claim 23 wherein said composition is administered from 1 to 4 times per day.

30. Canceled.

31. (Previously presented) The method according to claim 23 wherein said composition is administered before a meal.

32. (Previously presented) The method according to claim 23 wherein said composition is administered within about 15 minutes of a meal.

33. (Currently amended) A method of treating obesity in a human subject ~~in need thereof~~, said method consisting of administering to said subject an amount of a composition effective to treat obesity in said human subject, said composition comprising an obesity relief agent consisting of an amylin or an amylin agonist and a pharmaceutically acceptable carrier, wherein the amount of said amylin or amylin agonist administered in said composition is about 0.01 mg to about 5 mg per day, and wherein said human subject is in need of treatment for obesity.

34. (Previously presented) The method according to claim 33 wherein said amylin agonist is an amylin agonist analogue.

35. (Withdrawn) A method according to claim 34 wherein said amylin agonist analogue is selected from the group consisting of <sup>25,28,29</sup>Pro-h-amylin (SEQ ID NO:12), <sup>18</sup>Arg<sup>25,28,29</sup>Pro-h-amylin (SEQ ID NO:10) and <sup>18</sup>Arg<sup>25,28</sup>Pro-h-amylin (SEQ ID NO:8).

36. (Withdrawn) A method according to claim 34 wherein said amylin agonist analogue is <sup>25,28,29</sup>Pro-h-amylin (SEQ ID NO:12).

37. (Previously presented) The method according to claim 33 wherein said composition is administered subcutaneously.

38. (Previously presented) The method according to claim 33 wherein said composition is administered from 1 to 4 times per day.

39. (Previously presented) The method according to claim 33 wherein said composition

is administered before a meal.

40-67. Canceled.

68. (Previously presented) The method according to claim 24, wherein the amylin agonist analogue comprises an amino acid sequence of:

<sup>1</sup>A<sub>1</sub>-X-Asn-Thr-<sup>5</sup>Ala-Thr-Y-Ala-Thr<sup>10</sup>Gln-Arg-Leu-B<sub>1</sub>-Asn-<sup>15</sup>Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>-<sup>10</sup>F<sub>1</sub>-G<sub>1</sub>-  
Asn-H<sub>1</sub>-Gly-<sup>25</sup>Pro-I<sub>1</sub>-Leu-Pro-J<sub>1</sub>-<sup>30</sup>Thr-K<sub>1</sub>-Val-Gly-Ser-<sup>35</sup>Asn-Thr-Tyr-Z (SEQ ID  
NO:14)

wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

D<sub>1</sub> is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub> is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ile, Val, Ala or Leu

J<sub>1</sub> is Ser, Pro or Thr;

K<sub>1</sub> is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Val, J<sub>1</sub> is Pro, and K<sub>1</sub> is Asn; then one or more A<sub>1</sub> to K<sub>1</sub> is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

69. (Withdrawn) The method according to claim 24, wherein the amylin agonist

analogue comprises an amino acid sequence of (SEQ ID NO:15):

<sup>1</sup>A<sub>1</sub>-X-Asn-Thr-<sup>5</sup>Ala-Thr-Y-Ala-Thr-<sup>10</sup>Gln-Arg-Leu-B<sub>1</sub>-Asn-<sup>15</sup>Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>-<sup>20</sup>F<sub>1</sub>-  
G<sub>1</sub>-Asn-H<sub>1</sub>-Gly-<sup>25</sup>Pro-I<sub>1</sub>-Leu-J<sub>1</sub>-Pro-<sup>30</sup>Thr-K<sub>1</sub>-Val-Gly-Ser-<sup>35</sup>Asn-Thr-Tyr-Z

wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

D<sub>1</sub> is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub> is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ile, Val, Ala or Leu;

J<sub>1</sub> is Ser, Pro, Leu, Ile or Thr;

K<sub>1</sub> is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when

A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Val, J<sub>1</sub> is Pro and K<sub>1</sub> is Asn; or

A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is His, E<sub>1</sub> is Ser, F<sub>1</sub> is Asn, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Val, J<sub>1</sub> is Ser and K<sub>1</sub> is Asn;

then one or more of A<sub>1</sub> to K<sub>1</sub> is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

70. (Withdrawn) The method according to claim 24, wherein the amylin agonist analogue comprises an amino acid sequence of (SEQ ID NO:16):

<sup>1</sup>A<sub>1</sub>-X-Asn-Thr-<sup>5</sup>Ala-Thr-Y-Ala-Thr-<sup>10</sup>Gln-Arg-Leu-B<sub>1</sub>-Asn-<sup>15</sup>Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>-<sup>20</sup>F<sub>1</sub>-  
G<sub>1</sub>-Asn-H<sub>1</sub>-Gly-<sup>25</sup>I<sub>1</sub>-J<sub>1</sub>-Leu-Pro-Pro-<sup>30</sup>Thr-K<sub>1</sub>-Val-Gly-Ser-<sup>35</sup>Asn-Thr-Tyr-Z

wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

D<sub>1</sub> is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub> is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ala or Pro;

J<sub>1</sub> is Ile, Val, Ala or Leu;

K<sub>1</sub> is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn H<sub>1</sub> is Leu, I<sub>1</sub> is Pro, J<sub>1</sub> is Val and K<sub>1</sub> is Asn; then one or more of A<sub>1</sub> to K<sub>1</sub> is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

71. (Withdrawn) The method according to claim 24, wherein the amylin agonist analogue comprises an amino acid sequence of (SEQ ID NO:17):

<sup>1</sup>A<sub>1</sub>-X-Asn-Thr-<sup>5</sup>Ala-Thr-Y-Ala-Thr-<sup>10</sup>Gln-Arg-Leu-B<sub>1</sub>-Asn-<sup>15</sup>Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>-<sup>20</sup>F<sub>1</sub>-G<sub>1</sub>-  
Asn-H<sub>1</sub>-Gly-<sup>25</sup>Pro-I<sub>1</sub>-Leu-Pro-Pro-<sup>30</sup>Thr-J<sub>1</sub>-Val-Gly-Ser-<sup>35</sup>Asn-Thr-Tyr-Z

wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

D<sub>1</sub> is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub> is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ile, Val, Ala or Leu;

J<sub>1</sub> is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and

provided that when A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Val and J<sub>1</sub> is Asn; then one or more of A<sub>1</sub> to J<sub>1</sub> is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

72. (Previously presented) The method according to claim 34, wherein the amylin agonist analogue comprises an amino acid sequence of:

<sup>1</sup>A<sub>1</sub>-X-Asn-Thr-<sup>5</sup>Ala-Thr-Y-Ala-Thr<sup>10</sup>Gln-Arg-Leu-B<sub>1</sub>-Asn-<sup>15</sup>Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>-<sup>10</sup>F<sub>1</sub>-G<sub>1</sub>-Asn-H<sub>1</sub>-Gly-<sup>25</sup>Pro-I<sub>1</sub>-Leu-Pro-J<sub>1</sub>-<sup>30</sup>Thr-K<sub>1</sub>-Val-Gly-Ser-<sup>35</sup>Asn-Thr-Tyr-Z (SEQ ID NO:14)

wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

D<sub>1</sub> is His or Arg;  
E<sub>1</sub> is Ser or Thr;  
F<sub>1</sub> is Ser, Thr, Gln or Asn;  
G<sub>1</sub> is Asn, Gln or His;  
H<sub>1</sub> is Phe, Leu or Tyr;  
I<sub>1</sub> is Ile, Val, Ala or Leu  
J<sub>1</sub> is Ser, Pro or Thr;  
K<sub>1</sub> is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkylloxy, aryloxy or aralkyloxy; and provided that when A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Val, J<sub>1</sub> is Pro, and K<sub>1</sub> is Asn; then one or more A<sub>1</sub> to K<sub>1</sub> is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkylloxy, aryloxy or aralkyloxy.

73. (Withdrawn) The method according to claim 34, wherein the amylin agonist analogue comprises an amino acid sequence of (SEQ ID NO:15):

<sup>1</sup>A<sub>1</sub>-X-Asn-Thr-<sup>5</sup>Ala-Thr-Y-Ala-Thr-<sup>10</sup>Gln-Arg-Leu-B<sub>1</sub>-Asn-<sup>15</sup>Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>-<sup>20</sup>F<sub>1</sub>-  
G<sub>1</sub>-Asn-H<sub>1</sub>-Gly-<sup>25</sup>Pro-I<sub>1</sub>-Leu-J<sub>1</sub>-Pro-<sup>30</sup>Thr-K<sub>1</sub>-Val-Gly-Ser-<sup>35</sup>Asn-Thr-Tyr-Z

wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;  
B<sub>1</sub> is Ala, Ser or Thr;  
C<sub>1</sub> is Val, Leu or Ile;  
D<sub>1</sub> is His or Arg;  
E<sub>1</sub> is Ser or Thr;  
F<sub>1</sub> is Ser, Thr, Gln or Asn;  
G<sub>1</sub> is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ile, Val, Ala or Leu;

J<sub>1</sub> is Ser, Pro, Leu, Ile or Thr;

K<sub>1</sub> is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when

(a) A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Val, J<sub>1</sub> is Pro and K<sub>1</sub> is Asn; or

(b) A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is His, E<sub>1</sub> is Ser, F<sub>1</sub> is Asn, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Val, J<sub>1</sub> is Ser and K<sub>1</sub> is Asn;

then one or more of A<sub>1</sub> to K<sub>1</sub> is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

74. (Withdrawn) The method according to claim 34, wherein the amylin agonist analogue comprises an amino acid sequence of (SEQ ID NO:16):

<sup>1</sup>A<sub>1</sub>-X-Asn-Thr-<sup>5</sup>Ala-Thr-Y-Ala-Thr-<sup>10</sup>Gln-Arg-Leu-B<sub>1</sub>-Asn-<sup>15</sup>Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>-<sup>20</sup>F<sub>1</sub>-  
G<sub>1</sub>-Asn-H<sub>1</sub>-Gly-<sup>25</sup>I<sub>1</sub>-J<sub>1</sub>-Leu-Pro-Pro-<sup>30</sup>Thr-K<sub>1</sub>-Val-Gly-Ser-<sup>35</sup>Asn-Thr-Tyr-Z

wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

D<sub>1</sub> is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;



G<sub>1</sub> is Asn, Gln or His;  
H<sub>1</sub> is Phe, Leu or Tyr;  
I<sub>1</sub> is Ala or Pro;  
J<sub>1</sub> is Ile, Val, Ala or Leu;  
K<sub>1</sub> is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn H<sub>1</sub> is Leu, I<sub>1</sub> is Pro, J<sub>1</sub> is Val and K<sub>1</sub> is Asn; then one or more of A<sub>1</sub> to K<sub>1</sub> is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

75. (Withdrawn) The method according to claim 34, wherein the amylin agonist analogue comprises an amino acid sequence of (SEQ ID NO:17):

<sup>1</sup>A<sub>1</sub>-X-Asn-Thr-<sup>5</sup>Ala-Thr-Y-Ala-Thr-<sup>10</sup>Gln-Arg-Leu-B<sub>1</sub>-Asn-<sup>15</sup>Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>-<sup>20</sup>F<sub>1</sub>-G<sub>1</sub>-Asn-H<sub>1</sub>-Gly-<sup>25</sup>Pro-I<sub>1</sub>-Leu-Pro-Pro-<sup>30</sup>Thr-J<sub>1</sub>-Val-Gly-Ser-<sup>35</sup>Asn-Thr-Tyr-Z

wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;  
B<sub>1</sub> is Ala, Ser or Thr;  
C<sub>1</sub> is Val, Leu or Ile;  
D<sub>1</sub> is His or Arg;  
E<sub>1</sub> is Ser or Thr;  
F<sub>1</sub> is Ser, Thr, Gln or Asn;  
G<sub>1</sub> is Asn, Gln or His;  
H<sub>1</sub> is Phe, Leu or Tyr;  
I<sub>1</sub> is Ile, Val, Ala or Leu;

J<sub>1</sub> is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and

provided that when A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Val and J<sub>1</sub> is Asn; then one or more of A<sub>1</sub> to J<sub>1</sub> is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

76. (Currently amended) A method of treating obesity in a human subject **in-need thereof** comprising administering to said subject an amount of a composition **effective to treat obesity in said human subject, wherein said human subject is in need of treatment for obesity, said composition** comprising a peptide having an amino acid sequence of:

<sup>1</sup>A<sub>1</sub>-X-Asn-Thr-<sup>5</sup>Ala-Thr-Y-Ala-Thr<sup>10</sup>Gln-Arg-Leu-B<sub>1</sub>-Asn-<sup>15</sup>Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>-<sup>10</sup>F<sub>1</sub>-G<sub>1</sub>-Asn-H<sub>1</sub>-Gly-<sup>25</sup>Pro-I<sub>1</sub>-Leu-Pro-J<sub>1</sub>-<sup>30</sup>Thr-K<sub>1</sub>-Val-Gly-Ser-<sup>35</sup>Asn-Thr-Tyr-Z (SEQ ID NO:14)

wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

D<sub>1</sub> is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub> is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ile, Val, Ala or Leu

J<sub>1</sub> is Ser, Pro or Thr;

K<sub>1</sub> is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Val, J<sub>1</sub> is Pro, and K<sub>1</sub> is Asn; then one or more A<sub>1</sub> to K<sub>1</sub> is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy, wherein said amount is effective to treat obesity and wherein said composition is not administered in conjunction with another obesity relief agent.

77. (Withdrawn) A method of treating obesity in a human subject comprising administering to said subject an amount of a composition comprising a peptide having an amino acid sequence of (SEQ ID NO:15):

<sup>1</sup>A<sub>1</sub>-X-Asn-Thr-<sup>5</sup>Ala-Thr-Y-Ala-Thr-<sup>10</sup>Gln-Arg-Leu-B<sub>1</sub>-Asn-<sup>15</sup>Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>-<sup>20</sup>F<sub>1</sub>-  
G<sub>1</sub>-Asn-H<sub>1</sub>-Gly-<sup>25</sup>Pro-I<sub>1</sub>-Leu-J<sub>1</sub>-Pro-<sup>30</sup>Thr-K<sub>1</sub>-Val-Gly-Ser-<sup>35</sup>Asn-Thr-Tyr-Z

wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

D<sub>1</sub> is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub> is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ile, Val, Ala or Leu;

J<sub>1</sub> is Ser, Pro, Leu, Ile or Thr;

K<sub>1</sub> is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when

(a) A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Val, J<sub>1</sub> is Pro and K<sub>1</sub> is Asn; or

(b) A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is His, E<sub>1</sub> is Ser, F<sub>1</sub> is Asn, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Val, J<sub>1</sub> is Ser and K<sub>1</sub> is Asn;

then one or more of A<sub>1</sub> to K<sub>1</sub> is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy and with the proviso that the composition does not contain a cholecystokinin or a cholecystokinin agonist.

78. (Withdrawn) A method of treating obesity in a human subject comprising administering to said subject an amount of a composition comprising a peptide having an amino acid sequence of (SEQ ID NO:16):

<sup>1</sup>A<sub>1</sub>-X-Asn-Thr-<sup>5</sup>Ala-Thr-Y-Ala-Thr-<sup>10</sup>Gln-Arg-Leu-B<sub>1</sub>-Asn-<sup>15</sup>Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>-<sup>20</sup>F<sub>1</sub>-  
G<sub>1</sub>-Asn-H<sub>1</sub>-Gly-<sup>25</sup>I<sub>1</sub>-J<sub>1</sub>-Leu-Pro-Pro-<sup>30</sup>Thr-K<sub>1</sub>-Val-Gly-Ser-<sup>35</sup>Asn-Thr-Tyr-Z

wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

D<sub>1</sub> is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub> is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ala or Pro;

J<sub>1</sub> is Ile, Val, Ala or Leu;

K<sub>1</sub> is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn H<sub>1</sub> is Leu, I<sub>1</sub> is Pro, J<sub>1</sub> is Val and K<sub>1</sub> is Asn; then one or more of A<sub>1</sub> to K<sub>1</sub> is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy and with the proviso that the composition does not contain a cholecystokinin or a cholecystokinin agonist.

79. (Withdrawn) A method of treating obesity in a human subject comprising administering to said subject an amount of a composition comprising a peptide having an amino acid sequence of (SEQ ID NO:17):

<sup>1</sup>A<sub>1</sub>-X-Asn-Thr-<sup>5</sup>Ala-Thr-Y-Ala-Thr-<sup>10</sup>Gln-Arg-Leu-B<sub>1</sub>-Asn-<sup>15</sup>Phe-Leu-C<sub>1</sub>-D<sub>1</sub>-E<sub>1</sub>-<sup>20</sup>F<sub>1</sub>-G<sub>1</sub>-Asn-H<sub>1</sub>-Gly-<sup>25</sup>Pro-I<sub>1</sub>-Leu-Pro-Pro-<sup>30</sup>Thr-J<sub>1</sub>-Val-Gly-Ser-<sup>35</sup>Asn-Thr-Tyr-Z

wherein

A<sub>1</sub> is Lys, Ala, Ser or hydrogen;

B<sub>1</sub> is Ala, Ser or Thr;

C<sub>1</sub> is Val, Leu or Ile;

D<sub>1</sub> is His or Arg;

E<sub>1</sub> is Ser or Thr;

F<sub>1</sub> is Ser, Thr, Gln or Asn;

G<sub>1</sub> is Asn, Gln or His;

H<sub>1</sub> is Phe, Leu or Tyr;

I<sub>1</sub> is Ile, Val, Ala or Leu;

J<sub>1</sub> is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and

provided that when A<sub>1</sub> is Lys, B<sub>1</sub> is Ala, C<sub>1</sub> is Val, D<sub>1</sub> is Arg, E<sub>1</sub> is Ser, F<sub>1</sub> is Ser, G<sub>1</sub> is Asn, H<sub>1</sub> is Leu, I<sub>1</sub> is Val and J<sub>1</sub> is Asn; then one or more of A<sub>1</sub> to J<sub>1</sub> is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy and with the proviso that the composition does not contain a cholecystokinin or a cholecystokinin agonist.

80. (Previously presented) The method according to claim 23 wherein the amount of the amylin or amylin agonist administered is from about 30 µg/dose to about 300 µg/dose.

81. Canceled.

82. (Previously presented) The method according to claim 33 wherein said amylin or amylin agonist is administered at a dose from about 30 µg/dose to about 300 µg/dose.

83. Canceled.

84. (Previously presented) The method according to claim 76 wherein said peptide is administered at a dose from about 30 µg/dose to about 300 µg/dose.

85. (Withdrawn) The method according to claim 77 wherein said peptide is administered from about 1 to 4 times a day at an amount of about 0.0025 mg/dose to about 5 mg/dose.

86. (Withdrawn) The method according to claim 77 wherein said peptide is administered at a dose from about 30 µg/dose to about 300 µg/dose.

87. (Withdrawn) The method according to claim 78 wherein said peptide is administered from about 1 to 4 times a day at an amount of about 0.0025 mg/dose to about 5 mg/dose.

88. (Withdrawn) The method according to claim 78 wherein said peptide is administered at a dose from about 30 µg/dose to about 300 µg/dose.

89. (Withdrawn) The method according to claim 79 wherein said peptide is administered from about 1 to 4 times a day at an amount of about 0.0025 mg/dose to about 5 mg/dose.

90. (Withdrawn) The method according to claim 79 wherein said peptide is administered at a dose from about 30 µg/dose to about 300 µg/dose.

91. (Withdrawn) The method according to claim 76 wherein said peptide is <sup>25,28,29</sup>Pro-h-amylin (SEQ ID NO:12).

92. (Withdrawn) The method according to claim 77 wherein said peptide is <sup>25,28,29</sup>Pro-h-amylin (SEQ ID NO:12).

93. (Withdrawn) The method according to claim 78 wherein said peptide is <sup>25,28,29</sup>Pro-h-amylin (SEQ ID NO:12).

94. (Withdrawn) The method according to claim 79 wherein said peptide is <sup>25,28,29</sup>Pro-h-amylin (SEQ ID NO:12).

95. (Previously presented) The method according to claim 23 wherein said subject has a body mass index of at least 27.0 kg/m<sup>2</sup>.

96. (Previously presented) The method according to claim 33 wherein said subject has a body mass index of at least 27.0 kg/m<sup>2</sup>.

97. (Previously presented) The method according to claim 76 wherein said subject has a body mass index of at least 27.0 kg/m<sup>2</sup>.